

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended) A combinatorial deposition method of forming a film on a substrate disposed in a vacuum, the method comprising:

_____ providing a plurality of substrates simultaneously in a vacuum chamber so as to perform a single vacuum evacuation process;

_____ moving the plurality of substrates sequentially to a deposition position such that a substrate of said plurality of substrates is in the deposition position while a remainder of the plurality of substrates are in a cooling position;

_____ heating and subjecting to deposition the substrate in the deposition position such that the substrate in the deposition position is heated to a prescribed temperature while being subjected to deposition;

_____ cooling the remainder of the plurality of substrates in the cooling position to a temperature at which the remainder of the plurality of substrates are not influenced by the heating of the substrate in the deposition position,

_____ wherein the prescribed temperature is different among the plurality of substrates sequentially moved to the deposition position and heated.

~~characterized in that, in a method of performing thin film coating on a substrate disposed in a vacuum, two or more substrates can be moved to a deposition position or a cooling position, and sequentially only substrates to be coated are moved to the deposition position and subjected to deposition while substrates at the cooling position are cooled by a cooling mechanism, in one vacuum evacuation process.~~

Claim 2 (Currently Amended) The combinatorial deposition method according to claim 1, characterized in that deposition is performed for the ~~two or more~~ plurality of substrates with different deposition conditions for each substrate of the plurality of substrates.

Claim 3 (Currently Amended) The combinatorial deposition method according to claim 1, ~~characterized in that the two or more substrates can be moved to the deposition position or the cooling position~~ wherein said moving the plurality of substrates sequentially to said deposition position is performed by a rotation mechanism.

Claim 4 (Currently Amended) The combinatorial deposition method according to claim 1, ~~wherein claim 1 characterized in that a water-said cooling the remainder of substrates in the cooling position is performed by a water cooling mechanism or a liquid nitrogen-cooling mechanism is used.~~

Claim 5 (Currently Amended) The combinatorial deposition method according to ~~claim 1~~ claim 1, ~~characterized in that~~ wherein deposition is performed by sputter in which at least one deposition condition is varied for each of the plurality of substrates sequentially moved to said deposition position, said at least one deposition condition being selected from a group consisting of: ~~with any one or more of the following deposition conditions:~~ sputter gas pressure, sputter gas type, partial pressure, sputter power value, substrate temperature, distance between the substrate and a target, and sample bias, ~~bias, which are varied for each substrate in one vacuum evacuation process.~~

Claims 6-19 (Canceled)

Claim 20 (New) The combinatorial deposition method according to claim 1, wherein deposition is performed by sputter in which at least two deposition conditions are varied for each of the plurality of substrates sequentially moved to said deposition position, said at least two deposition conditions being selected from a group consisting of: sputter gas pressure, sputter gas type, partial pressure, sputter power value, substrate temperature, distance between the substrate and a target, and sample bias.

Claim 21 (New) The combinatorial deposition method according to claim 1, wherein deposition is performed by sputter in which at least one deposition condition is varied for each of the plurality of substrates sequentially moved to said deposition position, said at least one deposition condition being selected from a group consisting of: sputter gas pressure, sputter gas type, partial pressure, sputter power value, distance between the substrate and a target, and sample bias.

Claim 22 (New) The combinatorial deposition method according to claim 1, wherein the deposition position is distal from the cooling position such that the substrate in the deposition position is separate from the remainder of the plurality of substrates in the cooling position.

Claim 23 (New) The combinatorial deposition method according to claim 1, wherein only a single substrate of the plurality of substrates occupies the deposition position at one time.

Claim 24 (New) The combinatorial deposition method according to claim 1, wherein said

operation of cooling the remainder of the plurality of substrates cools at least two substrates of the plurality of substrates.